

Appl. No. 09 / 287,478

Amdt. Dated: Dec .16, 2004

Amendment E

Reply to Office action of July 12, 2004, mailed July 15

**Summary of Interview regarding Application 09/278,478  
11/23/2004 2:30-3:30**

Present: Senior Examiner Jean R. Homere and Examiner Thai Q. Phan; USPTO  
Christian S. Rode; Rode Consulting, Inc.

The meeting began promptly at 2:30 in Mr. Homere's office but quickly moved to an inside conference room, when it became clear the applicant had brought a laptop for the purpose of demonstration.

Because there was no available internet connection in the conference room, and if there were it would have taken time to configure, the demonstration of the present invention was by means of screen-captured video (TechSmith's "SnagIt" 7 tool, AVI format). Unfortunately, the laptop's power configuration was set to dim the display, however the video was still viewable.

The first video shown was of the present invention in the form of "WebSI7", ("WebSI7\_snagit.avi"; WebSI stands for Web Signal Integrity). In the video, Internet Explorer is running and displays HTML pages each with a GIF schematic and HTML form. The schematic has at least one transmission line, at least one line driver and at least one line receiver. The user edits the form fields to set up different physical conditions and then initiates a remote server simulation. The simulation results are displayed in a new window, and different modes are shown with GIF, PDF and Java plotting options. Both examples show selectable (SPICE) models from various manufacturers, encompassing the use of demonstrating component function within a system context. The applicant stated that the original motivation for creating WebSI was educational but then pursued the invention as a means of demonstrating the function of electronic components.

The second video shown was of the present invention in the form of "Active2", (Active2\_snagit.avi, in reference to Active filter synthesis and simulation). Internet Explorer is shown displaying a Java Applet that allows the selection of filter characteristics in one frame of a two frame window. The second frame is initially blank, but after "Calculate" is pressed a schematic with form inputs is created there (the form is displayed using Java). After this schematic and form are displayed, the results are simulated in much the same way as with the WebSI7 example.

*Note: These videos must be regarded as INFORMAL since some modifications / recompilations were needed even for WebSI7 and Active2, which correspond to drawings in the present application. In some cases updated modules were simply swapped into place where no visible difference was anticipated, however subtle differences could exist. They are solely for assistance to the examiner in understanding the preferred embodiment and its history, and of course the claims are intended to encompass more*

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*than the preferred embodiment.*

Mr. Homere asked about the difference between the present invention and PSPICE. Applicant replied that PSPICE is known principally as a single user PC-based product (client-only), although there may have been client-server versions of PSPICE created. In any event, applicant readily concedes that client-server versions of SPICE and other simulation tools have been used in the past, for example where the client is an X-Terminal (an "X-host"), communicating with a remote server. However, such simulations could not typically be made available to the public at large, because of security and resource management concerns. The present invention demonstrates suitable methods for "public simulation".

Applicant avowed that the intent of the present application is not to claim invention of the "Unique Identifier" (with acknowledgement of similarities to the concept of "Session Identifiers (Session ID)") nor SPICE simulation. The initial use of the Unique Identifier was to keep files separate for simultaneous users, and this was quickly extended to use in managing server resources and tracking user activity, among other uses.

Applicant avowed the invention was considered highly surprising in 1997. In later discussion applicant supposed one reason the invention was not achieved earlier was a failure to appreciate the cumulative improvement in CPU and network performance and how it might allow for "real-time" interaction. Later, applicant also briefly mentioned that the high visibility of the internet coupled with a lack of prior invention independently argues for some or all of Assumed Unworkability, Lack of Implementation, and New Principal of Operation.

Although the title references electronic circuits and components, applicant posited that a similar program to the preferred embodiment but intended for simulating chemical systems, where the form input variables were quantities of chemicals, temperatures, the presence of catalysts, etc. and where these inputs were merged with other data and presented to some hypothetical chemical simulation system with the output of the simulation rendered for browser display, would be within the scope of the claims.

Mr. Homere focused discussion on Claim 1 and how it compared to the prior art of van Huben. Mr. Homere quickly pointed out that the structure of Claim 1 may be in violation of S112 in that it was structural, but referenced methods.

With regard to 1a, there was discussion about whether van Huben disclosed transmission of a Unique Identifier to the Client. Applicant avows no and that Examiner Phan has so stated in his office actions.

At one point applicant pointed out that van Huben has a total of 11 patents with priority to December of 1996, but that they collectively focus on library/database and batch job management within a traditional paradigm of a client-server CAD environment, which

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has managed accounts. Van Huben's claims to web accessibility is found in a common small section and implies that the HTML interface use is to start batch jobs and get job reports. Van Huben mentions export of web-viewable results to a "typically secure repository" to make job results (reports?) available to the user. Not only does this appear to be an extra step, but also a secure repository is by definition not public. Examiner Phan seemed to agree that van Huben's web claims are not strong.

With regards to 1b, Mr. Homere also pointed to a missing "as" after "such" in 1b. Applicant pointed out that he learned from another examiner recently that claims needed to be a single sentence and that only the first line should be capitalized. There was considerable discussion about the meaning of "Form Structure Data", which led to a discussion about a glossary located within the specification that defined Form Structure Data and how claims are limited by the specification. This was apparently resolved in favor of leaving the term as is, however, Mr Homere suggested that i) and ii) might better be removed from this section and instead made dependent claims.

1c was found to be clear as is. In 1d, the phrase "template data" was found by Mr. Homere to be unclear and undefined in the glossary. Applicant conceded that he was already considering changing this to "simulation template data".

With regard to 1e, Applicant volunteered that perhaps the claim would be clearer if it said something like "Simulating said merged data to produce output data...", except applicant now realizes that this might not cover the actual operation of the preferred embodiment which creates an output file that can be used directly by a Java applet or processed further to a GIF, PNG, PDF, etc. format.

Mr. Homere suggested that with additional restrictions to better distinguish the application from van Huben, Claim 1 may become allowable. In addition to the aforementioned change to "template", these restrictions included 1) reference to a schematic (applicant preferred "diagram") associated with the Form Structure Data, 2) reference to identification of temporary files by means of the "Unique Identifier" and 3) changing "Output Data" to "Graphical Output Data".

Mr. Homere suggested that due to the short time remaining to put all claims in an allowable condition, it may be desirable for the applicant to pursue an RCE, and so that additional time for prior art searches could be made.

After Mr. Homere left around 3:45PM, Examiner Phan and applicant continued together for a short time to write down the changes Mr. Homere had suggested to Claim 1 (and by extension to Claim 10).

Examiner Phan expressed an interest in replacing the term "Unique Identifier" with "Session ID". For applicant's part, "Unique Identifier" remains preferred because the latter embraces the possibility of permanence or at least semi-permanence, as opposed to

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a Session ID with its connotation of "just for this period of use". Also, replacing "Unique Identifier" everywhere with "Session ID" was noted by applicant as potentially burdensome to all concerned. The meeting concluded around 4:00PM.